United States Environmental Protection Agency
Solid Waste and Emergency Response (5106)
EPA505-B-01-002
May 2001
www.epa.gov/swerffrr/

Partners In Progress

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Citizens Award Recognizes Contributions of Tri-Valley CARES

Celebrating Success

The U.S. Environmental Protection Agency (EPA) presented its first ever Hazardous Waste Citizens Award to Tri-Valley Communities Against a Radioactive Environment (Tri-Valley CARES) in 2000 for its contributions to the cleanup of two U.S. Department of Energy (DOE) Superfund sites in California. Tri-Valley CARES is a community group based in Livermore, California, that has been actively involved with DOE's two Lawrence Livermore National Laboratory (LLNL) sites in the local area for almost 20 years.


Members of Tri-Valley CARES accept the award from EPA representatives.

Founded in 1983, the group currently comprises more than 2,600 active members from a wide cross section of the community, including artists, teachers, biologists, and engineers. According to Tri-Valley CARES executive director Marylia Kelly, the group has participated in researching the environmental impacts of labs and enhancing LLNL's environmental oversight since its inception.

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FFRRO Moves Forward on Challenges

From The Director

Greetings! We're pleased to bring you another issue of *Partners in Progress (PIP)*, a newsletter published by EPA's Federal Facilities Restoration and Reuse Office (FFRRO).

It has been a while since our last issue of *PIP*, so we wanted to include updates on several major challenges that face us as we work on the environmental cleanup and reuse of federal facilities. In this issue are articles on institutional controls (ICs), ordnance and explosives (OE), and formerly used defense sites (FUDS).

For those of you who routinely follow federal facility cleanup issues, these topics are no surprise. As remedies are being selected, constructed and completed, we are faced with the challenge of how best to ensure protection of human health and the environment when contamination is left in place above levels suitable for unrestricted use. This is the case at the majority of federal

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From the Director

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facilities, not just Base Realignment and Closure (BRAC) installations. One of the significant challenges at facilities that remain under federal jurisdiction is how to ensure ICs will continue to work, since we don't have many of the usual "property control" mechanisms found in the private sector, such as deed restrictions, easements, and zoning ordinances.

Around the time this issue of *PIP* is published, the Department of Defense will be sending to Congress a report on ordnance and explosives. That report will show what we have intuitively known for quite some time–we have just scratched the surface of what needs to be done nationally. EPA will be moving forward over the next six months to put in place a *Guidance for Addressing Ordnance and Explosives* and publish an *EPA Handbook on the Management of Ordnance and Explosives at Closed, Transferred, and Transferring Ranges (CTTs)*. This issue of *PIP* provides a snapshot of where we currently are in the national debate.

Finally, EPA, the states, the U.S. Army Corps of Engineers, the Army, and the Tribal Association on Solid Waste and Emergency Response have been working to improve the FUDS environmental investigation and cleanup program. Good progress is being made and changes are in the offing, but much more work remains. Meanwhile, in order to establish a consistent EPA national approach to privately-owned FUDS that are not on the Superfund National Priorities List, an EPA Headquarters/Regional workgroup is drafting a FUDS policy that we are expecting to finalize late this spring.

We are also highlighting areas where, along with our state and federal partners, we are making progress. You'll see a summary of the seven federal facilities that achieved the "construction completion" milestone in Fiscal Year 2000 and an article about efforts to create a Uniform Federal Policy for the improvement of environmental quality data systems.

Two other stories feature stakeholder involvement. One is an article about a California citizens' group, Tri-Valley CARES, which received an award for public participation activities at two U.S. Department of Energy sites. Tri-Valley CARES is to be congratulated for the positive impact it has had on environmental decision-making and community awareness for nearly 20 years. The other story tells about a new Federal Facilities Working Group, formed under the National Environmental Justice Advisory Committee (NEJAC).

We hope you will find this issue interesting and informative. As always, we welcome your comments, questions, and suggestions. For more information, please visit our Web site at <www.epa.gov/swerffrr>. PIP

–James Woolford, FFRRO Director

Acronyms Explained

BRAC	Base Realignment and Closure
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CTT	Closed, Transferring, and Transferred
DoD	U.S. Department of Defense
DOE	U.S. Department of Energy
EPA	U.S. Environmental Protection Agency
FCOR	Final Close-out Report
FFRRO	Federal Facilities Restoration and Reuse Office
FUDS	Formerly Used Defense Sites
IC	Institutional Controls
MOU	Memorandum of Understanding
NEJAC	National Environmental Justice Advisory Committee
NPL	National Priorities List
OE	Ordnance and Explosives
PCOR	Preliminary Close-out Report
RCRA	Resource Conservation and Reuse Act
ROD	Record of Decision
SSAB	Site-Specific Advisory Board
USACE	U.S. Army Corps of Engineers
UXO	Unexploded Ordnance
VOC	Volatile Organic Compounds

Partners In Progress Philosophy

Stakeholders involved in federal facility cleanups are diverse, with differing backgrounds, interests, and perspectives. All of these stakeholders, however, share a single common goal—progress. *Partners In Progress* (*PIP*) provides an open forum for stakeholders to exchange information, offer solutions, and share stories about what works and what doesn't. We encourage you—our readers—to write to us about your activities that foster teamwork, promote innovation, and strengthen community involvement. Only by working together can we achieve "federal cleanups that put citizens first."

Interagency Task Force Goal:

Getting Better Environmental Data

A task force has developed a policy that will allow federal agencies to improve the way they collect environmental data and manage environmental technology programs. As its first major project, the Intergovernmental Data Quality Task Force, an interagency partnership among EPA, the Department of Defense (DoD) and the Department of Energy (DOE), recently completed the Uniform Federal Policy for Implementing Environmental Quality Systems in response to concern over the quality of data used in Superfund decision-making. Adaptation of a single policy as the basis of Quality Systems at EPA, DoD, and DOE is a vital step in achieving consistency in environmental data operations.

Failure to come up with quality data has occurred at a number of federal facilities during the past 10 years, according to a 1997 EPA Inspector General report. For example, an agency would gather data from one area of a site undergoing cleanup. The data gathered might characterize conditions in that particular area of the site, but did not reflect conditions in other sections of the site. Thus, the data gathered was accurate, but not fully representative of the site conditions as a whole. Data that cannot be validated or verified might mean that resulting agency decisions lack a sound, objective foundation.

"Because of the problems with EPA oversight and federal quality assurance systems, it is our opinion that laboratory analyses conducted to date at DoD and DOE sites cannot be presumed to be of appropriate quality for cleanup decision making," concluded the EPA Inspector General report, Laboratory Data Quality at Federal Facility Superfund Sites. "This should be a national concern, since DoD and DOE have over 90 percent of the 160 federal facility Superfund sites on or pending inclusion on the National Priorities List."

The task force, which was formed in 1997 in response to the Inspector General's report, addressed both real and perceived inconsistencies or deficiencies within "Quality Systems" in governmental organizations. The term "Quality Systems" refers to a process agencies employ to make sure that the products they provide are actually meeting the requirements of their customers. In addition to gathering of questionable data, deficiencies in the Quality System can also result in increased costs, project delays, and a higher potential risk of flawed decisions where site cleanups take place.

"EPA, DoD and DOE lacked a consistent understanding on how to obtain and manage environmental data," said FFRRO Director Jim Woolford, the task force chairman. "The Uniform Federal Policy puts a structure in place to assure agencies are gathering data of known and reliable quality."

EPA Regions and various sectors of DoD and DOE reviewed the policy, and the task force carefully considered numerous comments from the agencies as it was drafting the policy.

The new policy benefits all the partners by:

- Making environmental data gathering more credible to the public, by focusing on results, quality of data and services, and customer satisfaction.
- Promoting improved and consistent Quality Systems across EPA Regions, DoD, and DOE.
- Permitting flexibility, or graded quality assurance approaches, so data collection can be tailored to meet the desired end uses of the data.
- Clarifying the roles and responsibilities of each agency in managing environmental data and environmental technology efforts.
- Improving confidence that the system can produce quality data and technology to reduce duplication of oversight efforts.

The policy is consistent with EPA's Quality Order and, like EPA's order, is based on the American National Standards Institute/American Society for Quality Control (ANSI/ASQC) E-4 Standard, Specifications and Guidelines for Quality Systems for Environmental Data Collection and Environmental Technology Programs. The policy provides guidance on how to set up the program and reflects the needs of other federal agencies besides EPA. Use of consensus standards such as E-4 is strongly encouraged by the National Technology Transfer and Advancement Act.

EPA offices participating on the task force include the Office of Solid Waste and Emergency Response, the Quality Staff of the Office of Environmental Information, and four EPA regions.

At the same time, FFRRO is represented on EPA's Data Quality Strategic Plan Work Group so efforts at

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Institutional Controls:

Effectiveness Is Key to Remedy

By Allison Abernathy, FFRRO

Institutional controls are nonengineering measures designed to prevent or limit exposure to hazardous substances left in place at a site, or assure effectiveness of the chosen remedy.

EPA believes that institutional controls (ICs) and their effectiveness go to the heart of the very protectiveness of the remedy. To the extent that the ICs are not reliable, the remedy may fail. Even to consider a cleanup to less than "unrestricted use," we must focus on what makes the remedy protective, and those are the ICs.

In a keynote speech at the Eastern Land Use Control (LUC) Stakeholder Forum in Washington D.C., Tim Fields, EPA's former Assistant Administrator for the Office of Solid Waste and Emergency Response, presented the following points about ICs:

- ICs are remedies if they are used to limit or prevent exposure to hazardous substances, or prevent actions that could damage engineered remedies.
- Like other CERCLA remedies, an IC remedy must be evaluated under criteria established by the National Contingency Plan (NCP)–including "long-term effectiveness."
- ICs are described in the NCP as a "limited action" alternative; therefore, the Record of Decision (ROD) isn't considered a "no-action" ROD.
- ICs must be evaluated as rigorously as other remedial alternatives. Incomplete consideration of the reliability of an IC remedy increases the likelihood that a failed remedy will have to be revisited, and that additional costs will be incurred that could have been prevented by a thorough evaluation early in the process.
- Coordination with state and local governments and stakeholders early in the process is essential. Neighbors can be impacted by ICs, and, to varying degrees, implementation and monitoring and enforcement may be done at the state/local level.
- The acceptability and reliability of ICs should be evaluated very early in the process, long before a remedy decision is made, so that the use of ICs is not considered "a given."
- It is imperative to have agreement on roles and responsibilities of all parties responsible for implementing the ICs before they are selected as part of a remedy.
- Cleanup to levels permitting unrestricted use should be considered in risk assessments, to allow evaluation of the true cost of restricted use decisions. The incremental cost of cleanup to unrestricted use may be less costly than anticipated, as well as allow for higher and better land use. Also, the cost of monitoring and enforcement of an IC should be weighed, as should the continuing potential liability in the event of failure of the IC.

ICs must be evaluated as rigorously as other remedial alternatives.

EPA Guidance

In January 2000, EPA's Federal Facilities Restoration and Reuse Office (FFRRO) issued EPA's first national guidance on ICs. This guidance, *Institutional Controls and Transfer of Real Property under CERCLA Section 120 (h)(3)(A),(B) or (C)*, addresses all federal property transfers subject to CERCLA 120(h)(3)–the section of CERCLA that addresses all transfers of contaminated real properties to non-federal entities. The guidance outlines information that EPA needs from the transferring federal agency to determine that ICs will perform as expected in the future. The guidance is available from the FFRRO Web site at <www.epa.gov/swerffrr/>.

In September 2000, EPA's Office of Solid Waste and Emergency Response (OERR) issued a fact sheet, *Institutional Controls: A Site Manager's Guide to Identifying, Evaluating and Selecting Institutional Controls at Superfund and RCRA Corrective Action Cleanups*. This fact sheet focuses on evaluation and selection of ICs and discusses implementation, monitoring and enforcement issues. It provides a detailed matrix of the different types of ICs and some of their relative strengths and weaknesses. It also points out differences between federal facility and private sites in the development and implementation of ICs. This fact sheet can be found at EPA's Web site at <www.epa.gov/superfund/resources/institut/guide.pdf>.

Future EPA Efforts

Two national efforts are underway. FFRRO is developing a national IC guidance for active federal facilities. Currently, EPA Regions 4 and 10 have regional IC guidance for active federal facilities. This national guidance will provide uniform guidelines across all 10 EPA regions. FFRRO is in the scoping process now–evaluating the implementation of the Region 4 and 10 guidances for active facilities and conducting a study of federal facility RODs to see how to best craft this national guidance. FFRRO expects to circulate a draft in 2001.

OERR will develop a fact sheet on *Implementing, Monitoring, and Enforcing ICs* in 2001. While both of these efforts are chaired by a particular office, they are a team effort involving expertise and input from FFRRO, OERR, the Offices of General Counsel and Solid Waste, and all 10 of EPA's regional offices. PIP

Stakeholders Discuss Land-Use Controls

The first large-scale effort to gather input on land-use controls from a variety of diverse stakeholders occurred last year, when the International City/County Management Association (ICMA) and the Center for Public Environmental Oversight (CPEO) held two forums, one on each coast. ICMA and CPEO invited major stakeholder groups from the military services, EPA, state environmental departments, local reuse authorities and governments, communities and restoration advisory boards, native American groups, consultants, insurance providers, and academia to share information and discuss their priorities.

Land-use controls are defined broadly as legal and administrative measures that restrict activities and uses, as well as limit exposure and access to properties with contamination. Although consensus was not clearly reached at the forum, several ideas for improving the effectiveness of land-use controls were discussed:

- Conduct a thorough and open process that includes all relevant stakeholders.
- Design durable land-use controls to address the nature of the contamination.
- Include a detailed description of the land-use control in the cleanup documents.
- Ensure that deed restrictions and covenants apply to future owners and tenants.
- Determine how the land-use controls will be recorded and made available to the public.
- "Layer" land-use controls by not relying on a single entity or type of control.
- Determine funding responsibility before implementing the land-use controls.
- Create an advisory/oversight board.
- Undertake programs to educate communities and other affected stakeholders.

In addition to the stakeholder forums, ICMA's Base Reuse Consortium is creating a Web site to disseminate information related to land-use controls at military bases and other federal facilities.

For more information, contact Jacen McMillen at ICMA at <jmcmillen@icma.org>. PIP

FFRRO Offers Publications on Ordnance and Explosives

Project managers looking for help on managing ordnance and explosives (OE, which includes unexploded ordnance, or UXO) at former military ranges can look to two forthcoming FFRRO publications for guidance. In coordination with EPA regional offices, FFRRO has developed the *Guidance for Addressing Ordnance and Explosives* and the *EPA Handbook on the Management of Ordnance and Explosives at Closed, Transferred, and Transferring Ranges (CTTs)*. They build on the *DoD/EPA Interim Final UXO Management Principles for Implementing Response Actions at Closed, Transferred, and Transferring Ranges* issued in March 2000.

While the EPA/DoD Interim UXO Management Principles provide a good framework, more specific guidance has been sought by EPA regional offices, especially in regard to site characterization and cleanup of OE at CTT ranges. The U.S. Army Corps of Engineers (USACE) and the services also have internal guidance concerning explosives safety, but there is a lack of guidance concerning OE response that has regulatory agency and stakeholder support.

Range Rule Withdrawn

Since March 2000, the proposed Range Rule, intended to define a process for addressing risk to human health and the environment through characterization and cleanup of OE at CTT ranges, had been under interagency review with the Office of Management and Budget. On November 13, 2000, Sherri Goodman, former Deputy Under Secretary of Defense for Environmental Security, formally withdrew the Range Rule from the rule-making process. Federal consensus could not be reached on the following areas:

- How explosives safety would be handled under the rule.

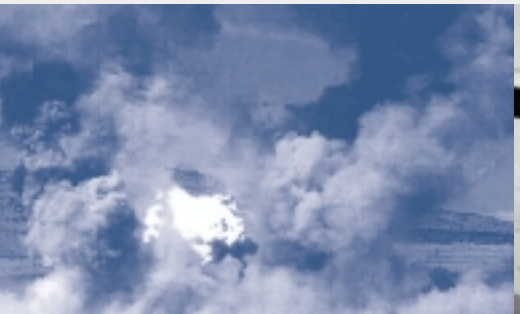
DoD and EPA Define Management Princ

DoD and EPA have agreed that human and environmental health and explosives safety need to be evaluated and addressed at the many closed, transferring, and transferred (CTT) military ranges that are set to enter the public domain. These agencies and other stakeholders, however, have had differing views on which processes they should follow to effectively conduct such activities. To resolve these differences, DoD and EPA worked together to develop a set of management principles to assist DoD personnel, regulators, tribes, states, and other stakeholders with reaching agreement on a common approach to response actions at CTT sites. To address specific concerns with respect to response actions at CTT ranges prior to implementation of the Range Rule, DoD and EPA agreed to the following general management procedures:

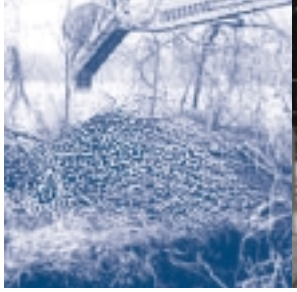
- When necessary, DoD will conduct response actions on CTT ranges that take into account human health, the environment, and explosives safety.
- DoD will communicate explosives safety information to regulators and the public to the maximum extent practicable.
- DoD and EPA will attempt to resolve issues at the lowest level.
- Legal authorities supporting site-specific response actions at CTT ranges will include, but are not limited to: CERCLA, the Defense Environmental Restoration Program, and the DoD Explosives Safety Board.

Additional principles include:

- Allowing for substantive involvement of tribes and states throughout the response action processes.
- Providing adequate site characterization through a variety of methods.
- Sharing information on relevant technological advances.
- Clearly defining land use controls.



From left to right: Open burn disposal at an Army depot in California. Excavated UXO.



From left to right: Open burning grounds at a former Army depot in Illinois. A picking conveyor, one of the excavation technologies used to clean up OE sites. Deer grazing at a wildlife refuge established on a former Army depot in Illinois.

- The use of emergency responses.
- Repeated actions to address a site.
- Remedy selection authority.
- Consistency with CERCLA and the NCP.
- Community involvement.

Despite the inability to reach agreement, DoD stated in its withdrawal letter that the agency believes it is good government to have a Range Rule and expects to re-propose the rule applying the knowledge learned from interaction with tribes, states, and the public. DoD will continue to conduct a range response program to reduce risk at CTT ranges. To support this effort, DoD also will provide internal guidance to its field personnel on how to proceed with a CTT response program.

Range Response Training

Experiences in the field have demonstrated a need for a training course on military munitions and cleanup. Ordnance and explosives response training is urgently needed by all remedial project managers (RPMs) (EPA, DoD, federal land managers, tribes, and states) to address OE site characterization and cleanup safely. Ordnance and explosives site characterization and cleanup present challenges and issues for all RPMs, but information for handling them has not been widely disseminated.

FFRRO is currently developing an OE pilot training session. The training will be designed to provide RPMs and others the latest guidance concerning characterization and cleanup. Topics to be covered by the training include the use of the conceptual site model (CSM) and statistical sampling methods; current technology advantages and limitations will be explored.

Conceptual Site Model (CSM)

To date, range responses have not generally employed a conceptual model to frame response actions. This shortcoming has promoted wide variability in the response process and concern from the public and regulatory community as to whether actions taken are sufficient. A model or series of models is needed by field personnel to better frame necessary range responses from planning to closeout.

EPA Region 10, in conjunction with the EPA National Exposure Research Laboratory (NERL), is leading an effort with USACE and the states to develop a CSM or series of models. The long-term objective of this effort is to issue guidance on the development of CSMs and their use for OE sampling. Questions should be directed to Harry Craig, Region 10 RPM, at 503 326-3689.

Range Risk Methodologies

Assessing and characterizing the risk from ordnance and explosives are challenging. In 1996, DoD established a workgroup to develop a risk methodology that specifically identified risks associated with OE. A qualitative approach was adopted that attempted to define: (1) when further investigation is required; (2) when additional response actions are necessary; and (3) when no action should be considered. The workgroup developed an Interim Range Rule Risk Methodology (iR3M), which was made available for public comment in March 2000. However, several parties, including EPA, expressed reservations about iR3M. As a result, DoD convened the last meeting of the iR3M workgroup in March 2001. At this meeting, the Army took comments and suggestions from workgroup members on how to move foward on a

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iples for CTT Ranges

- Seeking adequate funding.
- Determining removal depths through evaluation of site-specific data and risk analysis based on reasonably anticipated future land use.
- Determining the nature and extent of other constituent contamination.
- Conducting CERCLA response actions and/or involving current and prospective federal land managers to address explosives safety hazards when appropriate.

DoD and EPA agreed that preferred response actions will be consistent with these management principles, CERCLA, and any applicable RCRA corrective action requirements. These principles, however, do not affect federal, tribal, or state regulatory or enforcement powers or authorities concerning hazardous wastes, hazardous substances, pollutants, or contaminants, nor do they expand or constrict the waiver of sovereign immunity by the United States contained in any environmental law. PIP

2000 Construction Completions

FY 2000 Federal Facility Construction Completions

In Fiscal Year 2000, seven federal facilities on the Superfu
struction completion. This achievement represents the h
for any single fiscal year, increasing the total number to
complex, each construction completion represents a signifi

A construction completion site is a former toxic waste si
complete, all immediate threats have been addressed, and a
ated the Construction Completions List (CCL) to simplify
the successful completion of cleanup activities.

Construction completion of a site is a significant benchr
longer threatening the health and well-being of the surrour
soil, air, surface water, or groundwater. It also means that,
ing, the site is usually ready to be reused for economic, soc

"Recognizing the magnitude and complex issues associat
community should be proud of this significant accomplish
completion coordinator.

The following federal facility sites achieved construction
(FCOR) was filed, which means that site has reached comp
required before the site can be deleted from the NPL. Oth
to complete before achieving their FCOR, have filed prelin
physical construction related to the cleanup must have bee
ing. One example of this may be an ongoing pump-and-tr
remaining on the site and the schedule for site completion.

The "construction completion" determination was achie
with the signing of a PCOR. Future issues of *Partners in P*
al facilities that reach this milestone during FY 2001.

For more information on construction completions, con
<jeng.richard@epa.gov> or visit <www.epa.gov/superfund/

Fort Devens-Sudbury Training Annex, Massachusetts

The Sudbury Training Annex is a former Army installation covering 2,750 acres, including portions of the towns of Maynard, Stow, Hudson, and Sudbury, Massachusetts. Established in 1942, the annex has served as an ammunition depot, an ordnance testing station, a troop training and research area, and a laboratory disposal area. The Annex was selected for closure in 1995.

Portions of the Annex contain volatile organic compounds (VOCs), pesticides, and inorganics in amounts that surpass safe drinking water standards. According to the site's FCOR, the Army has conducted initial cleanup actions, as well as long-term remedial actions for specific sections, including the Old Gravel Pit Landfill, a former fire training and flame retardant clothing testing area, and smaller areas that contained some contaminated soil.

In 1991, the Army began investigating the extent of the site contamination on the landfill and completed construction of a landfill cap by 1996. A record of decision (ROD) regarding groundwater was finalized in 1997. In 1987, the Army began removing contaminated soil from the fire training area, and it removed an underground storage tank used to store fuel in 1992. Contaminated soil removal action took place from 1995 to 1996. After a supplemental groundwater investigation in 1996, it was determined in September 1997 that no further action was necessary at the former fire training area.

"To answer the public's many questions and to successfully demonstrate to the regulators that all remediation work necessary has been completed at the Annex, the Army and its contractors worked hard at creatively crafted, appropriate investigations with the buy-in of the regulatory project managers and the public through the Technical Review Committee," said Christine Williams, an environmental engineer with the Federal Facility Superfund Section of EPA New England.

Include Seven Federal Facilities

und National Priorities List (NPL) were brought to con-
ighest number of federal facility construction completions
29 sites. As the cleanups on the NPL become increasingly
cant milestone for the federal facilities involved.

te where physical construction of all cleanup actions is
ll long-term threats are under control. In 1993, EPA cre-
its system of categorizing sites and to better communicate

mark in the cleanup process. It means contaminants are no
nding community or spreading uncontrolled through the
even though long-term cleanup actions may still be operat-
ial, or environmental purposes.

ed with federal facility site cleanups, the federal facility
ment," said Richard Jeng, EPA's national construction

completion in 2000. At one site, a final close-out report
pliance with all statutory requirements. This report is
er sites, which may have had more complicated activities
inary close-out reports (PCORs). With a PCOR, all
n completed, but operation and treatment may be ongo-
eat operation. The PCOR identifies activities still

ved at Loring Air Force Base, Maine, on March 23, 2001,
rogress will include information on Loring and other feder-

tact Richard Jeng at 703 603-8749 or
esources/closeout/index.htm>.

Pease Air Force Base, New Hampshire

Pease Air Force Base maintained aircraft from the 1950s on a 4,365-acre site in Rockingham County, New Hampshire, during which time contaminants from fuels, oils, lubricants, solvents, and protective coatings were released into the environment. The base was closed in 1991, and the Air Force has been conducting an environmental cleanup program there since 1983.

According to the Pease PCOR, operable units on the site were organized into eight different zones encompassing 49 different sites, based on geographic location, similar groundwater properties, and geologic units. The Air Force identified 38 different areas of concern and undertook dozens of remedial actions, including: landfill consolidation and capping; excavation and off-base disposal of contaminated soils and sediments; in-situ treatment of contaminated soils using vapor extraction/air sparging; pump-and-treat systems; in-situ treatment of contaminated groundwater using permeable reactive barrier technology; and monitored natural attenuation. A total of 11 RODs were signed.

"The many cleanup and redevelopment successes that have been achieved to date at this site have been the result of a dedicated team effort by the Air Force Base Conversion Agency, New Hampshire Department of Environmental Services, Pease Development Authority, and EPA," said Mike Daly, remedial project manager for the site. "Maintaining this team approach will ensure timely and successful completion of the large property transfer and site closeout workload which remains for Pease."

The Pease airfield is now a fully operational commercial airport, while other property is currently being used or developed for light commercial and industrial facilities. A large portion of the base was also transferred to the U.S. Department of Interior for use as a national wildlife refuge.

Trench excavation for Pease AFB Site 49 groundwater treatment system.

Naval Air Warfare Center (NAWC), Pennsylvania

PAWC is an 824-acre facility in Warminster, Pennsylvania, that was used for military aircraft assembly and modification during the 1940s and closed in 1996 under the Base Realignment and Closure Act. NAWC was placed on the National Priorities List due to a threat that eight disposal areas posed to groundwater quality. The area surrounding NAWC is completely dependent on groundwater for both public and private water supplies.

The facility was divided into 10 operable units to address contaminated surface and ground water, soils, and sediment. The Navy investigated 53 areas of concern as part of an Environmental Baseline Survey and took short-term removal actions to excavate and dispose of contaminated waste, soil, and debris and to extend existing public water supplies. A total of 12 RODs were signed.

In 1997, a removal action was conducted at sites that contained a series of disposal tenches and pits. In 1998 and 1999, soil contaminated with cadmium, lead, and other heavy metals was removed from three other sites. Erosion controls are in place at one of the sites, and two other sites have been covered with clean, vegetated soil.

According to the site's PCOR, the Navy demonstrated that final groundwater remedies were operating properly and successfully. The Navy also put in place plans for stream monitoring and ongoing groundwater monitoring, operation and maintenance, and implementation of institutional controls. With the exception of a Navy housing area, the property has been transferred to the private sector, and is surrounded by homes, commercial and industrial activities, and a golf course.

"The success of the cleanup is evidenced by the fact that all of the wells once believed to be threatened by groundwater contamination now have been connected to the public water supply," said Darius Ostrauskas, remedial project manager for Region 3.

Tobyhanna Army Depot, Pennsylvania

Tobyhanna Army Depot is a 1,293-acre military facility established in 1909 in northeastern Pennsylvania that was used for machine gun and field artillery training, an ambulance and tank regiment training center, and an ordnance storage depot during World War I. The depot later was used as a Civilian Conservation Corps camp area and for storage and supply uses. Tobyhanna is currently a communication/electronics maintenance and supply depot.

The Army first discovered VOCs on the site in 1981. The state sampled nearby wells in the mid-1980s and identified VOC contamination, which led the Army to conduct numerous investigations to find the potential source areas of these contaminants. The facility was placed on the NPL in 1990.

According to the site's PCOR, as of September 2000, RODs have been signed for five operable units, some of which were used for hazardous waste burning and storage and others that contained PCBs, unexploded artillery shells, or housed an inactive sanitary landfill. In addition to these five areas, the Army initiated a number of CERCLA removal actions and also investigated 58 additional potential areas of concerns, all of which have been formally closed out and require no further action.

The Army has been sampling both onpost monitoring wells and residential wells since 1988, which show that the VOC concentrations have been steadily decreasing over time. In 1995, the Army excavated VOC-contaminated soil thought to be the major source of VOCs found in the groundwater. The Army is also supplying residents served by contaminated wells with alternative sources of water.

"Although the areas of the base that house groundwater will remain on the National Priorities List, our goal is to be able to remove a section of the base from the NPL within the next year," said Mark Stephens, remedial project manager with EPA Region 3.

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2000 Construction Completions

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Yuma Marine Corps Air Station (MCAS), Arizona

In 1928, the federal government leased 640 acres of land from Yuma County, Arizona, for an airfield. Yuma MCAS is still an active air station, occupying approximately 3,000 acres of land near the southeast corner of Yuma and sharing runway privileges with Yuma International Airport. While the facility has been used for a variety of DoD missions over the years, its current mission is to provide services and materials support operations to the Marine Aircraft Wing and its subordinate units. Due to both past and current activities, the groundwater in and around the site is contaminated with chlorinated solvents. In addition, the soil is contaminated with asbestos from landfills on the site. Yuma MCAS was placed on the NPL in 1990.

The Navy investigated 18 areas of concern and completed two RODs for Yuma MCAS. According to the Yuma PCOR, all major construction activities have been completed for treatment of impacted groundwater beneath the site, with the possible exception of the installation of additional monitoring wells if required.

"The groundwater remediation is proceeding much more rapidly than we thought it would," said Martin Hausladen, EPA site manager for Yuma MCAS. "We have been very pleased by the success of the system, and I would be highly surprised if we had to put more wells in." To ensure that the treatment methods continue providing adequate protection of human health and the environment, the Navy will conduct a review of the site every five years. No significant change and/or redevelopment of the site is planned for the near future.

Luke Air Force Base, Arizona

Luke Air Force Base is an active, 4,198-acre base in Glendale, Arizona, that has been used to provide advanced flight training to fighter pilots since 1941. The base is home to 4,900 military personnel and their dependents and has a daily population of approximately 8,000 people. Phoenix and other nearby cities depend on the groundwater basin underneath the site for drinking water.

Aircraft maintenance and light industrial operations generated potentially hazardous wastes such as petroleum residues, cleaning solvents, and other materials. The base was placed on the NPL in 1990 because plane discharges and waste disposal practices at the base resulted in waste oils and VOCs contaminating the soil and possibly groundwater.

The U.S. Air Force signed a Federal Facilities Agreement (FFA) with EPA and Arizona's Departments of Environmental Quality and Water Resources to investigate the site. The FFA parties organized the site into two operational units, and RODs were signed for both. The FFA parties identified a total of 33 areas of concern, many of which were determined to require no action, but in five areas contamination such as lead, VOCs, and liquid wastes required remedial action. According to the PCOR, actions taken included a cap, surface controls, extraction, groundwater monitoring, mechanical sifting, and institutional controls.

"The pace of progress at Luke AFB has been accelerated as a result of the cooperative approach adapted by the Air Force, the State of Arizona and EPA," said James Ricks, EPA's regional project manager for the site. "The next step will be initiating the documentation process to delist the site from the NPL in FY 2001."

Naval Undersea Warfare Center (NUWC) Division, Washington

NUWC is a 340-acre site in Keyport, Washington, that the U.S. Navy acquired in 1914 to develop a still-water torpedo testing range. Activities at the site include torpedo maintenance, fuel storage, welding, painting, carpentry, plating, and sheet metal work. Chlorinated solvents, PCBs, and heavy metal contamination put the site on the NPL in 1989.

According to the PCOR, an FFA was signed in 1990 between EPA, the Navy, and the Washington State Department of Ecology, which handles remedial project management through an understanding with EPA Region 10. The groups organized two operational units, signed two RODs, and identified seven areas of concern. The four major remedial actions taken included soil remediation, capping, and monitoring, as well as sediment removal from a creek bed contaminated with PCBs.

Perhaps the most interesting remedial action, however, was the phytoremediation system used to address chlorinated solvents that were contaminating groundwater under the site's former landfill. Approximately 1,000 hybrid poplars were planted over two "hot spots" on the landfill to remediate the contaminated groundwater naturally with their roots.

"The key to this cleanup was the opportunity Mother Nature gave us," said Bruce Cochran of the Washington State Department of Ecology, who served as remedial oversight manager. "The hydrology of the site is keeping the contaminated groundwater away from drinking water resources, and the marsh conditions under and around the landfill are causing a natural dechlorination of the solvents. This gives us time to apply an innovative technology–the trees–to capture and process the contaminated groundwater in the source areas." PIP

Ordnance and Explosives

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risk methodology, while DoD is rethinking its approach to a new Range Rule.

Statistical Methodologies

Statistical methodologies currently used or proposed by USACE for defining the nature and extent of OE contamination need to be evaluated due to significant concerns raised by EPA, tribes, states, and the public. In January 2001, FFRRO distributed to EPA regional offices a guidance memorandum entitled *Interim Guidance on the Use of SiteStats/GridStats and Other Army Corps of Engineers Statistical Techniques Used to Characterize Military Ranges.*

USACE currently uses several geophysical field sampling, exposure characterization, and analytical techniques at military ranges. These include SiteStats, GridStats, UXO Calculator, and Ordnance and Explosives Cost Effectiveness Risk Tool. NERL is jointly working with USACE and the states to critically review and evaluate their effectiveness. A report is expected soon.

Other Efforts

The Strategic Management Analysis, Requirements, and Technology (SMART) Team at Savannah Army Depot in Illinois is a partnership among the Army, EPA, the Illinois Department of Natural Resources, and the Jo-Carroll Depot Local Redevelopment Authority. The SMART Team meets monthly to provide a forum for dialogue and consensus among the various stakeholders to develop innovative solutions to cleanup issues at the site, especially regarding the identification and removal of OE.

Since forming in September 2000, the SMART Team has worked to prioritize the cleanup and transfer of parcels to facilitate the economic reuse potential of the base. The group has also worked to develop a conceptual site model and data quality objectives for the investigation and characterization of OE at a small arms disposal area that will serve as a pilot for investigating the larger and more problematic firing range. The group's next meeting is scheduled for May 2001.

Finally, the DoD Strategic Environmental Research and Development Program (SERDP) is sponsoring several research projects on OE detection, site characterization, and cleanup. For a full listing, see the SERDP home page <http://www.serdp.org/research/>.

For more information or copies of the two new FFRRO documents on managing OE at CTTs, contact FFRRO at 202 260-9924.

Contributors to this article were James Woolford and Vic Wieszek, FFRRO. PIP

NEJAC Charters Federal Facilities Working Group

In May 2000, the National Environmental Justice Advisory Council (NEJAC) chartered a new working group to address environmental justice issues and concerns at sites that are currently or formerly owned or managed by the federal government. These sites include, but are not limited to, military bases, artillery ranges, and research labs.

"People have come to NEJAC meetings calling for a specific forum for federal facility issues," said Brandon Carter of the U.S. Environmental Protection Agency (EPA), the designated federal official for the working group.

In response to these public comments, NEJAC tasked the working group to:

- Identify and evaluate key issues of concern to environmental justice communities regarding activities and operations at and around federal facilities.
- Formulate a set of national policy recommendations to address community concerns.
- Provide a forum for dialogue with communities.
- Compile a list of available resources to communities and stakeholders to increase public participation.
- Produce a report to be presented to the NEJAC Executive Committee at the conclusion of these activities.

The working group began in November 2000; it will continue for 18 months. The working group will use a case study methodology to evaluate and review specific federal facility sites and/or policies. Their collected data will help them develop an understanding of common factors for success and failure at these sites.

"Our ultimate goal is to publish a document with policy recommendations that provide a baseline for understanding the issues and highlight best practices," Carter said. The group held the first of three planned face-to-face meetings in Arlington, Virginia, on January 24, 2001, where they finalized an agenda for activities and agreed on their methodology.

Aside from Carter, the multi-stakeholder group comprises 13 other members representing tribal, state, and local governments; affected communities; non-governmental organizations; and businesses.

The group is also structured to include substantial representation from EPA, the U.S. Department of Defense, the U.S. Department of Energy, and the U.S. Department of Interior. Representatives from these agencies signed a Memorandum of Understanding (MOU) to memorialize this partnership at the December 11, 2000, NEJAC meeting.

> **"The participation of our federal partners in this process has truly been historic."**
>
> —Brandon Carter, EPA, designated federal official for NEJAC federal facilities working group

"The participation of our federal partners in this process has truly been historic," Carter said. "The departments of Defense, Energy, and Interior have really stepped up to the plate and showed their commitment to environmental justice by signing the MOU and participating in the working group at the level that they have. I really expect that when the project is finished, some definite good will come of this effort."

NEJAC is a federal advisory committee that was established by charter in 1993 under the Federal Advisory Committee Act to provide independent advice, consultation, and recommendations to the EPA Administrator on environmental justice matters. PIP

Interagency Task Force

<Continued From Page 3>

the program level are being coordinated with Agency-wide initiatives.

"The Intergovernmental Data Quality Task Force is an excellent example of an interagency partnership that is operating by consensus to improve the way it manages environmental data," Carter said. "The task force adopted this policy with full group consensus and will issue it as an interim final document after all three agencies issue formal approval."

For more information, contact Mike Carter at 202 260-5686 or <carter.mike@epa.gov> or visit the FFRRO Web site at <www.epa.gov/swerffrr>. PIP

Policy and Working Group to Address Pr

Over the past several years, EPA has had concerns about the handling of environmental investigations and cleanups at formerly used defense sites (FUDS)–those facilities throughout the country which the Department of Defense (DoD) has owned, operated or otherwise controlled. The concerns stem from a lack of communication and coordination between the U.S. Army Corps of Engineers (USACE) and regulators. The concerns include USACE actions at FUDS that are inconsistent with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), a lack of appropriate community involvement, and "no further action" decisions made without regulator input. EPA is also concerned that efforts to address FUDS with contamination caused by other parties are not being coordinated with regulators. To address these issues, EPA is developing a new FUDS policy and participating on an interagency working group empowered to make recommendations to improve the investigation and response at FUDS.

Background

After the passage of CERCLA in December 1980, the President delegated authority to DoD to clean up hazardous waste sites at active and formerly used defense properties. In 1983, the Defense Appropriations Act initiated environmental restoration activities at FUDS, and in 1984 execution of the program was delegated by DoD to the Army, with USACE serving as the executing agent. This delegation made USACE the chief executor and manager for environmental restoration activities at FUDS. Because DoD no longer owns or uses the FUDS properties, a USACE district commander serves as each property's installation commander, executing environmental restoration projects and fulfilling associated responsibilities.

The scope and magnitude of the FUDS program are significant, with 9,100 properties identified for possible inclusion in the program. The properties include military bases, experimental laboratories, recruitment outposts, missile sites, distribution depots and bombing ranges. They have been returned to private ownership, given to states, or transferred to other federal agencies because DoD no longer needed the properties. According to USACE, approximately 8,700 preliminary assessments have been completed at these properties. USACE estimates that about 5,600 properties require no further action on behalf of USACE and about 3,100 properties have been determined to need remediation by USACE. Since 1984, the FUDS program has spent more than $2 billion on cleanup activities.

FUDS Improvement Working Group

To improve working relationships with EPA, tribes, and states, the Army established a steering committee, called the FUDS Improvement Working Group (FIWG) in October 2000. The committee, chaired by the Army, evaluates concerns about FUDS and makes recommendations to address them. Other FIWG members include represen-

EPA Region 9 Tackles FUDS Issues Overseas

Regional EPA offices also deal with FUDS issues in the U.S. territories under their jurisdiction. USACE is currently working with EPA Region 9 under a RCRA 7003 enforcement order to clean up polychlorinated biphenyls (PCBs) in Tanapag Village on the island of Saipan, the capitol of the U.S. Commonwealth of the Northern Mariana Islands (CNMI). Once a property of Japan, Saipan was occupied by U.S. forces during World War II and used as an airbase. Shortly after the Japanese surrender, the United Nations recognized Saipan as a trust territory of the United States. It became a self-governing U.S. commonwealth in 1978. Tanapag's PCB contamination—up to 20,000 ppm in the soil—occurred when capacitors used in DoD operations were brought to Saipan in the 1960s and began to leak.

The CNMI originally requested EPA assistance in 1989, and remediation of the site became part of the FUDS program administered by USACE, although progress on the cleanup has been started and stopped several times over the past decade. In addition, many residents of Saipan expressed concerns that USACE was not providing adequate information about the cleanup process and demanded more vigorous pursuit of community involvement.

Although USACE initially contested the enforcement action, it later agreed to follow the order and to form a working group to address community concerns about FUDS problems in the Pacific. Spearheaded by USACE's Pacific Ocean Division in partnership with EPA Region 9, the group will review and discuss more than 500 known sites and the identification of new ones, as well as allowing the parties to address and resolve issues of concern. The working group includes representatives from Hawaii, Guam, American Samoa, the CNMI, and various federal agencies.

For more information on Region 9 FUDS, contact Kathleen Shimmin at 415 744-2216 or <shimmin.kathleen@epa.gov>.

ivately Owned FUDS

tatives from USACE, the Association of State and Territorial Solid Waste Management Officials (ASTSWMO), the Tribal Association on Solid Waste and Emergency Response (TASWER), DoD, and EPA. The FIWG meets monthly and has already made several recommendations: establish a statewide Management Action Plan process for four pilot states; allow the re-opening of three to five historic Inventory Project Reports (INPRs) per year per state to be funded through the Defense-State Memorandum of Agreement (DSMOA) program, and coordinate all INPRs with a regulator.

EPA's FUDS Policy

EPA has been also working on a policy to provide guidance on how the Agency will undertake its obligations and responsibilities to address privately used FUDS not on the National Priorities List (NPL). The draft policy focuses on:

- EPA's role in site assessment.
- EPA's role in overseeing and implementing response actions at FUDS.
- EPA's framework for coordinating activities with the USACE.
- EPA's enforcement alternatives for ensuring that known or threatened releases of hazardous substances at FUDS are addressed in accordance with CERCLA or other applicable authorities.

Recognizing that tribal, state, or other agencies oversee most FUDS, EPA's intention under this policy is to be consistent with existing deferral and coordination policies and to minimize potential duplication of effort from tribes, states, USACE, or other responsible parties. The draft policy was officially released for comment on July 26, 2000, with final release expected in FY 2001. EPA has agreed to delay issuing the final policy until after a 90-day assessment of FIWG's progress.

The FUDS program has a long history of Congressional interest, from site-specific issues to programmatic concerns (e.g., adequate funding). Most recently, Congressman John Dingell (D-Michigan) has requested the General Accounting Office (GAO) to do a study on FUDS and former military ranges. As part of the study, GAO will be assessing the FUDS cleanup process and regulator involvement. FFRRO is participating in the GAO study.

For more information, contact Renee Wynn (202 260-8366) or Sean Flynn (202 260-3199).

Contributors to this article include James Woolford, Renee Wynn, and Vic Wieszek, FFRRO. PIP

EPA Region 6 and USACE Tally Together

One of the most important steps in the FUDS cleanup effort is identifying the sites and evaluating their risks. In EPA's Region 6, this effort has been made easier through cooperation. In January 2001, Region 6 completed a draft inventory and preliminary evaluation of risks for all the FUDS in Arkansas, Louisiana, New Mexico, Oklahoma, and Texas. This project began in 1997, when EPA visited each of the USACE district offices and reviewed FUDS files. "Within Region 6, we are utilizing a team approach—coordinating the efforts of the RCRA New Mexico and Federal Facilities Section, RCRA Enforcement Section, and the Superfund Site Assessment Team—to achieve the most impact with the fewest resources," said Michael Overbay, regional FUDS coordinator.

Region 6 identified 907 FUDS, mostly in New Mexico and Texas. Of these, 415 were recommended for further action, and 42 were identified has having significant potential for listing on the Superfund National Priorities List. Due to a lack of file information, EPA was unable to complete the environmental evaluation of another 165 sites. "To put the regional universe of FUDS in perspective, at the November 2000 meeting of the Association of State and Tribal Solid Waste Management Officials in Austin, Texas, USACE presented information that Region 6 had the second highest number of sites, and the second highest 'cost-to-complete' in the country, exceeding that of three other Regions combined," Overbay noted.

USACE and each of the state environmental agencies received a copy of the draft inventory for review and comment. In March 2001, Region 6 invited each state environmental agency and their respective USACE district and division offices to a series of meetings to discuss the report and identify any mistakes EPA had made in identifying or evaluating each site. The report is scheduled for May 2001.

For more information on the Region 6 FUDS inventory, contact Michael Overbay at 214 665-6482 or <overbay.michael@epa.gov>.

The Community Connection

Conference Discusses Tribal Strategy

The International Institute of Indigenous Resource Management held a DoD/DOE/EPA-sponsored conference in November 2000 on the basic principles of the Federal Indian Trust Obligation, Agency Indian Policies, and Indian Law as it applies to federal facilities cleanup in Indian country. FFRRO presented its *Tribal Strategy* that describes its role in promoting the involvement of tribal governments in environmental cleanup at and around federal facilities. DoD and DOE presented their agencies' Native American policies and programs. Small workgroups met for facilitated discussion of potential solutions to the numerous challenges and impediments to the cleanup process that were identified during conference presentations. The group's top three priorities are: improved communication between tribes and federal agencies; consideration of cultural impacts and traditional knowledge in the risk assessment process; and increased knowledge of the government-to-government consultative process and the U.S. trust obligation.

Talking Stick

What is a "talking stick?" A talking stick is a device often used by tribal organizations to identify the person who has the right to speak at a given moment, while others listen. Used within the context of a meeting or council, it is often handed to requesters by a leader or elder in a given order, so members can provide their input into a discussion or council meeting. You can see FFRRO's *Talking Stick* brochure, which illustrates our initiatives with tribes and exchange ideas, on our Web site at <www.epa.gov/swerffrr>, or write to Dianna Young at the address on the back of this newsletter to request copies.

EPA Extends Comment Period for Public Involvement Policy

EPA has extended the public comment period on its *Draft 2000 Public Involvement Policy* through July 31, 2001. The draft is based on a 1981 policy that was never fully implemented, and will provide guidance and direction to EPA officials on effective ways to involve the public in the Agency's regulatory and program decisions and activities, including cleanup plan selection for hazardous waste sites. The policy's main goals are to:

- Strengthen EPA's commitment to early and meaningful public involvement.
- Ensure that environmental decisions incorporate the interests and concerns of affected people and entities.
- Use many different techniques to create opportunities for public involvement in Agency decisions.
- Establish clear and effective procedures for public involvement in EPA's decision-making processes.

The draft policy can be viewed at <www.epa.gov/stakeholders/policy.htm> or received via e-mail by contacting <kahn.lisa@epa.gov>. Printed copies can be requested from Loretta Schumacher at 202 260-3096. Comments should be e-mailed to <stakeholders@epa.gov> or sent to Patricia Bonner, EPA Office of Policy, Economics, and Innovation, Mail Code 1807, 1200 Pennsylvania Avenue NW, Washington, DC 20460.

In addition to gathering official comments on the draft policy, EPA will host a two-week online dialogue in July, when 500 participants can exchange messages about the policy and 1,000 others can observe. To receive an invitation to the dialogue with instructions on how to register, e-mail Patricia Bonner at <patricia.bonner@epa.gov>.

Hazardous Waste Citizens Award

<Continued From Page 1>

Originally intended as a supplement to the nuclear facility at Los Alamos, LLNL is a nuclear weapons lab run by DOE and the University of California (UC). As times have changed, however, it has also become a world-class science center for its breakthrough developments in magnetic and laser fusion energy, non-nuclear power, biomedicine, and environmental science.

Due to its nuclear testing activities, LLNL's main site has been on EPA's Superfund National Priorities List (NPL) since 1987, and has been identified as one of the worst contaminated sites in the country. LLNL's Site 300, a 7,000-acre high-explosives testing range in the hills between Livermore and the nearby town of Tracy, made the NPL in 1990. Both sites have been active since the 1950s and are now heavily contaminated with hazardous waste, including chemical solvents and uranium. Tri-Valley CARES became formally involved with LLNL's Superfund efforts as each site was listed on the NPL.

"Tri-Valley CARES members put in a tremendous number of hours to educate themselves and the community on all aspects of the Superfund cleanup," said Kathy Setian, EPA Region 9 Superfund project manager. "Their persistence and dedication have ensured that community needs are met."

In 1989, Tri-Valley CARES became the first community group in EPA Region 9 to win a Technical Assistance Grant (TAG), which provided financial resources to continue and expand its Superfund community involvement efforts. According to David Cooper, EPA Region 9 community involvement coordinator, Tri-Valley CARES used the TAG to keep the community informed about the technical and global issues of the cleanup. Members also acted as effective spokespeople by expressing community concerns and making specific technical comments to LLNL and EPA during all stages of the cleanup effort.

"Community involvement is very important to Superfund cleanups," Cooper said. "Not only does EPA have a regulatory responsibility to get the public involved, but the public has a right to know how their money is being spent, what the potential risks are, and how they can contribute to the decision-making process."

Tri-Valley CARES helped the public participate in decision-making by developing and circulating a set of 12 criteria for community acceptance of the Site 300 cleanup plan. The plan was initially developed by LLNL and will serve as the legal basis for all future aspects of the cleanup. To achieve EPA approval, the plan must meet nine Agency criteria, including community acceptance. Tri-Valley CARES outlined acceptance criteria with community preferences for the cleanup schedule, cleanup levels and methods, future land use, budget planning, and levels of public involvement.

"Part of our work as I see it is to take technical data and translate it into plain language to empower the community to become involved," Kelly said. "EPA and Livermore Labs each look at the cleanup through different lenses—they are interested in budget issues and following regulations. Our job is to press EPA to do the most they can, fulfilling our role in the mosaic of interested parties."

As part of its continuing community efforts, Tri-Valley CARES hosts monthly meetings open to the public to discuss the latest LLNL activities. The group also disseminates information via a monthly newsletter and a Web site (<www.igc.org/tvc/index.htm>) and provides Spanish translations of LLNL's environmental publications. PIP

Write To Us

We encourage your questions, comments, and contributions. Please send your input to Dianna Young by mail at U.S. EPA/FFRRO, Mailcode: 5106, 1200 Pennsylvania Ave., N.W., Washington, DC 20460; e-mail at <young.dianna@epa.gov>; or fax at 202 260-5646.

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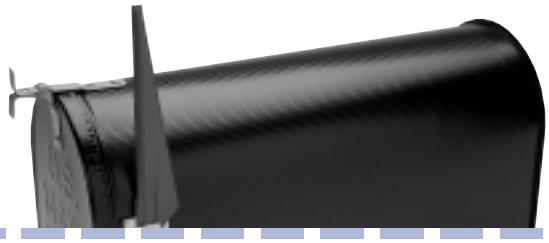

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DOE Streamlines Guidance for Advisory Boards

In an effort to involve affected communities more directly in its planning and decision-making processes for cleanup of nuclear weapons complexes, the U.S. Department of Energy's Office of Environmental Management (OEM) posted new Site-Specific Advisory Board (SSAB) guidance on the Web in December 2000.

The SSABs' main function is to provide the Assistant Secretary for Environmental Management and other DOE officials with policy information, advice, and recommendations concerning OEM's environmental restoration, waste management, nuclear material and facility stabilization and disposition, integration, site closure, project completion, and science and technology activities. Additionally, the SSAB provides input and recommendations on strategic decisions that impact future use, long-term stewardship, risk management, transportation, budget priorities, and any other projects or issues that affect environmental management.

The new guidance, which takes a more streamlined approach to SSABs, includes:

- Renewed emphasis on SSAB membership composition, including DOE policy on ethnic and gender diversity on its advisory boards.
- Revision and clarification of the conflict of interest, compensation, and reimbursement policies for SSAB members.
- Guidance for local SSAB termination.

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